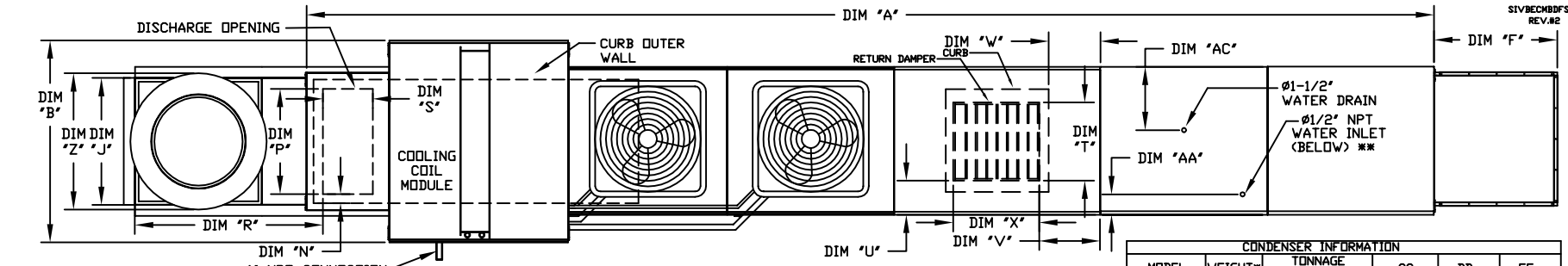
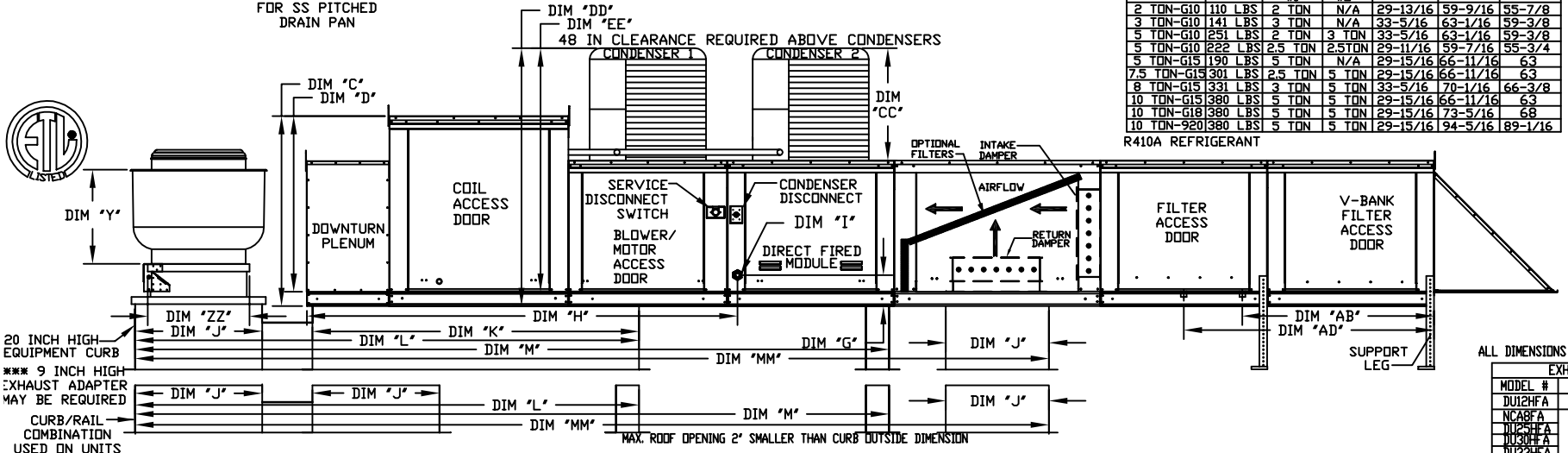
MODULAR OUTDOOR DOWN DISCHARGE DIRECT FIRED RECIRCULATING HEATER ROOF TOP PACKAGE WITH COOLING, EVAPORATIVE COOLER (WARM), V-BANK AND SCREEN (WARM)

SIVBECMBDFSAHCCDPRTP-MPU
REV.#2 05/05/2015





CONDENSER INFORMATION						
MODEL	WEIGHT*	TONNAGE #1	TONNAGE #2	CC	DD	EE
2 TON-G10	110 LBS	2 TON	N/A	29-13/16	59-9/16	55-7/8
3 TON-G10	141 LBS	3 TON	N/A	33-5/16	63-1/16	59-3/8
5 TON-G10	251 LBS	2 TON	3 TON	33-5/16	63-1/16	59-3/8
5 TON-G10	222 LBS	2.5 TON	2.5TON	29-11/16	59-7/16	55-3/4
5 TON-G15	190 LBS	5 TON	N/A	29-15/16	66-11/16	63
7.5 TON-G15	301 LBS	2.5 TON	5 TON	29-15/16	66-11/16	63
8 TON-G15	331 LBS	3 TON	5 TON	33-5/16	70-1/16	66-3/8
10 TON-G15	380 LBS	5 TON	5 TON	29-15/16	66-11/16	63
10 TON-G18	380 LBS	5 TON	5 TON	29-15/16	73-5/16	68
10 TON-920	380 LBS	5 TON	5 TON	29-15/16	94-5/16	89-1/16

R410A REFRIGERANT

ALL DIMENSIONS ARE NOMINAL AND GIVEN IN INCHES

EXHAUST UNIT DIMENSIONS			
MODEL #	Y	Z	ZZ ***
DU12HFA	14-1/2	22	19
NCA8FA DU25HFA DU30HFA DU33HFA	18-1/2	27-1/4	21
NCA10FA DU50HFA	21-1/2	30-1/4	21
NCA14FA DU75HFA DU85HFA	23	33-3/4	24-3/4
NCA16FA	23-1/2	39-3/8	28
NCA18FA	29-1/2	38-7/8	28
NCA24FA	30-5/8	43-3/8	33
NCA30FA	33-1/2	52-3/4	40

	UNIT DIMENSIONS								CURB/RAIL					DISCHARGE OPENING				RETURN DAMPER OPENING					WATER INLET		DRAIN OPENING	
MODEL	A	B	C	D	E	F	G	H	J	K	L	M	MM	N	P	R	S	T	U	V	W	X	AA	AB	AC	AD
D.250-G10	209-1/2	39-3/8	42-3/4	39	3-3/4	22-3/8	7-13/16	95-7/16	21	71	106	166-5/8	198-1/16	3-9/16	13-7/8	36-13/16	11-1/2	14	8	14	12-1/2	18	4-1/2	38-1/2	13	48-1/4
D.500-G10	209-1/2	39-3/8	42-3/4	39	3-3/4	22-3/8	7-13/16	95-7/16	21	71	106	166-5/8	198-1/16	3-9/16	13-7/8	36-13/16	11-1/2	14	8	14	12-1/2	18	4-1/2	38-1/2	13	48-1/4
D.250-G15	223-1/2	49-3/8	47-3/4	44	3-3/4	30-5/16	7-13/16	109-7/16	31	79	124	190-5/8	227-1/16	4-5/16	22-3/8	46-9/16	18	22-3/4	8	11	7-1/2	24	4-1/2	38-1/2	18	48-1/4
D.500-G15	223-1/2	49-3/8	47-3/4	44	3-3/4	30-5/16	7-13/16	109-7/16	31	79	124	190-5/8	227-1/16	4-5/16	22-3/8	46-9/16	18	22-3/4	8	11	7-1/2	24	4-1/2	38-1/2	18	48-1/4
D.750-G15	223-1/2	49-3/8	47-3/4	44	3-3/4	30-5/16	7-13/16	109-7/16	31	79	124	190-5/8	227-1/16	4-5/16	22-3/8	46-9/16	18	22-3/4	8	11	7-1/2	24	4-1/2	38-1/2	18	48-1/4
D.500-G18	234-1/2	54-3/8	56-3/8	51-1/8	5-1/4	34-3/16	9-1/2	114-7/16	35	84	133	199-5/8	239-1/16	6-5/16	22-3/8	49-1/2	18	28	8	7	4-1/2	30	4-1/2	44	20	57-1/4
D.750-G18	234-1/2	54-3/8	56-3/8	51-1/8	5-1/4	34-3/16	9-1/2	114-7/16	35	84	133	199-5/8	239-1/16	6-5/16	22-3/8	49-1/2	18	28	8	7	4-1/2	30	4-1/2	44	20	57-1/4
D.1000-G18	234-1/2	54-3/8	56-3/8	51-1/8	5-1/4	34-3/16	9-1/2	114-7/16	35	84	133	199-5/8	239-1/16	6-5/16	22-3/8	49-1/2	18	28	8	7	4-1/2	30	4-1/2	44	20	57-1/4
D.1000-920	292-7/8	60-7/16	64-3/8	59-1/8	5-1/4	47-1/4	13-9/16	151	42	115-3/16	171-3/16	255-7/8	303-7/8	5-1/4	31-1/2	56-13/16	23-1/2	33	10	11	8	36	4-1/2	41-1/8	23-1/2	52-7/8
D.1500-920	292-7/8	60-7/16	64-3/8	59-1/8	5-1/4	47-1/4	13-9/16	151	42	115-3/16	171-3/16	255-7/8	303-7/8	5-1/4	31-1/2	56-13/16	23-1/2	33	10	11	8	36	4-1/2	41-1/8	23-1/2	52-7/8

OPTIONAL MIXING BOX FILTERS
FILTER SIZE & QTY
10"x16"x2" (5)
10"x16"x2" (5)
20"x25"x2" (2), 16"x25"x2" (1)
20"x25"x2" (2), 16"x25"x2" (1)
20"x25"x2" (2), 16"x25"x2" (1)
15"x20"x2" (4), 15"x15"x2" (2)
15"x20"x2" (4), 15"x15"x2" (2)
15"x20"x2" (4), 15"x15"x2" (2)
18"x25"x2" (4), 16"x20"x2" (2)
18"x25"x2" (4), 16"x20"x2" (2)

UNIT INFORMATION.

	BTU RANGE (MBH)			GAS PRESSURE		GAS CONNECTION	TONNAGE RANGE		FILTERS	
MODEL	BURNER LENGTH	BTU LOW	BTU HIGH	MIN	MAX	"I" (NPT)	MIN	MAX	FILTER SIZE & QTY	MAX. FILTER VELOCITY
D.250-G10	6"	18	275	7" WC	14" WC	3/4	2 Ton	5 Ton	20"x25"x2" (3)	@3000 CFM = 348 FPM
D.500-G10	12"	18	550	7" WC	14" WC	3/4	2 Ton	5 Ton	20"x25"x2" (3)	@3000 CFM = 348 FPM
D.250-G15	6"	18	275	7" WC	14" WC	1	5 Ton	10 Ton	16"x20"x2" (8)	@6000 CFM = 428 FPM
D.500-G15	12"	18	550	7" WC	14" WC	1	5 Ton	10 Ton	16"x20"x2" (8)	@6000 CFM = 428 FPM
D.750-G15	18"	27.5	825	7" WC	14" WC	1	5 Ton	10 Ton	16"x20"x2" (8)	@6000 CFM = 428 FPM
D.500-G18	12"	18	550	7" WC	14" WC	1	5 Ton	10 Ton	20"x25"x2" (8)	@8000 CFM = 348 FPM
D.750-G18	18"	27.5	825	7" WC	14" WC	1	5 Ton	10 Ton	20"x25"x2" (8)	@8000 CFM = 348 FPM
D.1000-G18	24"	36.6	1100	7" WC	14" WC	1	10 Ton	10 Ton	20"x25"x2" (8)	@8000 CFM = 348 FPM
D.1000-920	24"	36.6	1100	7" WC	5 PSI	1-1/4	10 Ton	10 Ton	16"x20"x2" (15)	@13000 CFM = 495 FPM
D.1500-920	30"	45.8	1375	7" WC	5 PSI	1-1/4	10 Ton	10 Ton	16"x20"x2" (15)	@13000 CFM = 495 FPM

STANDARD EVAPORATIVE COOLING UNIT				
TOT. WEIGHT	MEDIA SIZE & QTY	VEL. @ MAX. CFM	NOZZLES	MAX. FLOW RATE
1390 LBS	20"x25"x2" (3)	406 FPM	6	3 GPH
1395 LBS	20"x25"x2" (3)	406 FPM	6	3 GPH
1885 LBS	16"x20"x2" (8)	429 FPM	10	5 GPH
1890 LBS	16"x20"x2" (8)	429 FPM	10	5 GPH
1895 LBS	16"x20"x2" (8)	429 FPM	10	5 GPH
2260 LBS	20"x25"x2" (8)	348 FPM	14	7 GPH
2265 LBS	20"x25"x2" (8)	348 FPM	14	7 GPH
2270 LBS	20"x25"x2" (8)	348 FPM	14	7 GPH
3535 LBS	16"x20"x2" (15)	572 FPM	24	12 GPH
3550 LBS	16"x20"x2" (15)	572 FPM	24	12 GPH

*ADD CONDENSING UNIT WEIGHT TO WEIGHT IN TABLE ABOVE

CELDEK EVAPORATIVE COOLING UNIT				
TOT. WEIGHT	MEDIA SIZE & QTY	VEL. @ MAX. CFM	NOZZLES	MAX. FLOW RATE
1395 LBS	20"x24"x12"	1050 FPM	12	3.9 GPH
1400 LBS	20"x24"x12"	1050 FPM	12	3.9 GPH
1880 LBS	25"x32"x12"	1080 FPM	20	6.5 GPH
1885 LBS	25"x32"x12"	1080 FPM	20	6.5 GPH
1890 LBS	25"x32"x12"	1080 FPM	20	6.5 GPH
2250 LBS	30"x36"x12"	1067 FPM	28	8.4 GPH
2255 LBS	30"x36"x12"	1067 FPM	28	8.4 GPH
2260 LBS	30"x36"x12"	1067 FPM	28	8.4 GPH
3505 LBS	38"x43"x12"	1322 FPM	35	10.15 GPH
3520 LBS	38"x43"x12"	1322 FPM	35	10.15 GPH

**MAX. EVAP WATER PRESSURE = 50 PSI @ 70 DEG. F

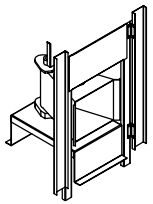
Direct Fired Profile Plate Specifications:

Description:
Direct fired burners shall have patented (US Patent No: US6629523B2), self-adjusting profile plates designed to ensure proper air velocity and pressure drop across the burner. Profile plates shall allow burners to achieve clean combustion by limiting by-product levels to a maximum of 5ppm of carbon monoxide (CO), and 0.5ppm of nitrogen dioxide (NO2).

Application:
Spring-loaded burner profile plates are engineered to automatically react to the momentum of a fresh air stream, without the need for any motors or actuators to mechanically adjust them. With this feature, all DF units are designed for demand control ventilation (DCV) requirements.

Certifications:
All profile plate assemblies shall be included in the DF unit's ETL listing and comply with combined safety standards ANSI Z83.4 and CSA 3.7 (non-recirculating DF heaters) and ANSI Z83.18 (recirculating DF heaters).

General Construction:
-Profile plates shall be formed from G90 galvanized steel.
-Profile plates shall vary in size per unit.
-Profile plates shall be mounted along the same plane as the discharge of the burner.
-Design shall incorporate properly torqued, permanently mounted spring hinges.



Direct Fired (DF) Profile Plate Assembly